

What is claimed is:

1        1. A method, comprising:  
2                receiving data relating to a database system;  
3                *SAC* receiving, from the device, information associated with at least one  
4                characteristic of the data;  
5                partitioning the data for storage in a database system having plural data  
6                storage units based on the characteristic associated with the data; and  
7                storing the partitioned data in one or more storage units of the database  
8                system.

1        2. The method of claim 1, wherein receiving the information comprises  
2                receiving the information from a client system, the device comprising the client system.

1        3. The method of claim 1, wherein receiving the information comprises  
2                receiving at least one of an average value of the data, a uniform distribution of the data, a  
3                minimum value of the data, and a maximum value of the data.

1        4. The method of claim 3, wherein partitioning the data comprises defining  
2                straight-line segments based on at least one of the average value of the data, the uniform  
3                distribution of the data, the minimum value of the data, and the maximum value of the  
4                data.

1        5. The method of claim 4, wherein partitioning the data further comprises  
2                defining breakpoints to provide the straight-line segments.

1        6. The method of claim 1, wherein partitioning the data for storage in the  
2                database system comprises dividing the data into segments containing related data.

1                   8.        The method of claim 7, wherein partitioning the data further comprises  
2   executing an algorithm to organize the data.

1           9.       The method of claim 1, wherein storing the partitioned data in the database  
2 system comprises storing the partitioned data in a relational database system.

1 10. The method of claim 1, further comprising storing the partitioned data  
2 under the supervision of a limited number of data servers relating to the database system.

1      *Subj* 11. An apparatus, comprising:  
2      a database;  
3      a network interface;  
4      a database controller coupled to the database, wherein the database  
5      controller is adapted to receive partitioning information and perform a partitioning task  
6      on data received through the network interface based on the partitioning information,  
7                the database controller adapted to further store the data that is partitioned  
8      by the partitioning task, the partitioning task to identify one or more portions of the  
9      database in which each segment of the partitioned data is stored.

12. The system of claim 11, wherein the database is a parallel database system.

13. The system of claim 11, wherein the database is a relational database.

1 14. The system of claim 11, wherein the database controller comprises:  
2 a query coordinator coupled to the network interface, the query coordinator  
3 to receive query requests from the network interface;  
4 a partitioner to partition data and perform at least one of storing and  
5 locating partitioned data in the database in response to the query requests; and  
6 a partitioner data storage coupled to the partitioner, the partitioner data  
7 storage to store information associated with at least one characteristic of the data to  
8 enable the partitioner to partition data.

1 15. The system of claim 14, wherein the partitioner is capable of executing an  
2 algorithm, based on the stored information, for partitioning the data.

1 16. The system of claim 15, further comprising a plurality of data servers to  
2 store and access partitioned data in the database.

1 17. The system of claim 11, further comprising a client system, wherein the  
2 client system sends data to the database through the network interface.

1 18. The system of claim 17, wherein the client system sends at least one  
2 characteristic of the data to be used by the database controller to partition the data.

1 19. An article comprising one or more storage media containing instructions  
2 that when executed cause a device to:  
3 receive information associated with at least one characteristic of data to be  
4 stored into a database from a remote device;  
5 partition the data for storage in a database system based on the  
6 characteristic of the data; and  
7 store the partitioned data in the database system.

1 20. The article of claim 19, wherein the instructions when executed cause the  
2 device to execute an algorithm to partition the data.

1           21. The article of claim 19, wherein the instructions when executed cause the  
2 device to divide the data into segments containing related data.